ABSTRACT

A magnetically aligned scraped-surface heat exchanger and method are provided. A stator includes electromagnetic elements, such as solenoids. A rotor, attached to a shaft of the heat exchanger, rotates within the stator. Sensors detect the position of the rotor, such as a radial or an axial position. The position data is provided to the control circuit. When the position of the rotor is to be re-aligned or adjusted, the control circuit activates or de-activates one or more of the solenoids of the stator to alter or complete a magnetic field through the rotor to re-align the rotor and the shaft attached thereto.

GDL/kw

15

10